

Claims

1. Axial piston machine having a first group of pistons (34.1) for delivery into a first hydraulic circuit and at least a second group of pistons (34.2) for delivery into at least a second hydraulic circuit,
characterized in
that the pistons (34.1) of the first group and the pistons (34.2) of the second group are supported on a common swash plate (37'), and
that the swash plate (37') for adjusting a first volumetric displacement of the first group of pistons (34.1) into the first hydraulic circuit is pivotable about a first swivelling axis (55) and for adjusting a second volumetric displacement of the second group of pistons (34.2) into the second hydraulic circuit is pivotable about a second swivelling axis (56).

2. Axial piston machine according to claim 1,
characterized in
that the first swivelling axis (55) and the second swivelling axis (56) and a centre line (40) of the axial piston machine intersect at a point (S).

25 3. Axial piston machine according to claim 1 or 2,
characterized in
that the first swivelling axis (55) and the second swivelling axis (56) are approximately perpendicular to one another.

30 4. Axial piston machine according to one of claims 1 to 3,
characterized in
the pistons (34.1) of the first group are disposed in a

longitudinally displaceable manner in first cylinder bores (33.1), wherein the first cylinder bores (33.1) are connectable to the first hydraulic circuit by a first kidney-shaped control port (50) and by a second kidney-shaped control port (51) and the first kidney-shaped control port (50) and the second kidney-shaped control port (51) are disposed in each case opposite in relation to a vertical projection (55') of the first swivelling axis (55) into the plane of the first and second kidney-shaped control port (50, 51).

5. Axial piston machine according to one of claims 1 to 4,
characterized in

that the pistons (34.2) of the second group are
15 disposed in a longitudinally displaceable manner in second cylinder bores (33.2), wherein the second cylinder bores (33.2) are connectable to the second hydraulic circuit by a third kidney-shaped control port (57) and by a fourth kidney-shaped control port (58) and the third kidney-shaped control port (57) and the fourth kidney-shaped control port (58) are disposed
20 opposite in relation to a vertical projection (56') of the second swivelling axis (56) into the plane of the third and fourth kidney-shaped control port (57, 58).

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6. Axial piston machine according to one of claims 1 to 5,
characterized in

that the swash plate (37') at its side remote from the pistons (34) has a region (59) with a hemispherical
30 geometry.

7. Axial piston machine according to one of claims 1 to 6,
characterized in

that the pistons (34.1) of the first group and the
pistons (34.2) of the second group are disposed in a
longitudinally displaceable manner in cylinder bores
(33), which are disposed on a common graduated circle
5 in a cylinder drum (24).

8. Axial piston machine according to one of claims 1 to 6,
characterized in

that the pistons (34.1) of the first group and the
10 pistons (34.2) of the second group are disposed in a
longitudinally displaceable manner in first cylinder
bores (33.1) and second cylinder bores (33.2)
respectively, wherein the first cylinder bores (33.1)
15 and the second cylinder bores (33.2) are disposed on
different graduated circles in a cylinder drum (24).

9. Axial piston machine according to one of claims 1 to 8,
characterized in

that for adjusting the inclination of the swash plate
20 (37') relative to the first swivelling axis (55) and
for adjusting the inclination of the swash plate (37')
relative to the second swivelling axis (56) in each
case an adjusting device is provided.

25 10. Axial piston machine according to one of claims 1 to 8,
characterized in

that for adjusting the inclination of the swash plate
(37') relative to the first swivelling axis (55) and
relative to the second swivelling axis (56) a common
30 adjusting device is provided.